# EXHIBIT G

## Charted Claims: Non-method: 1

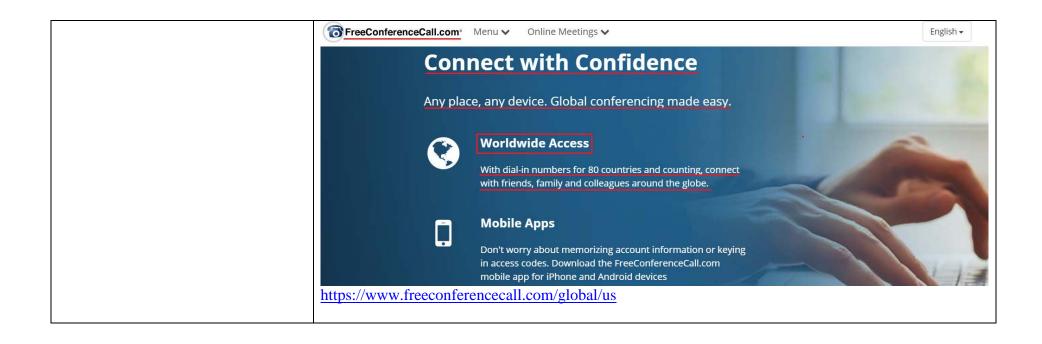
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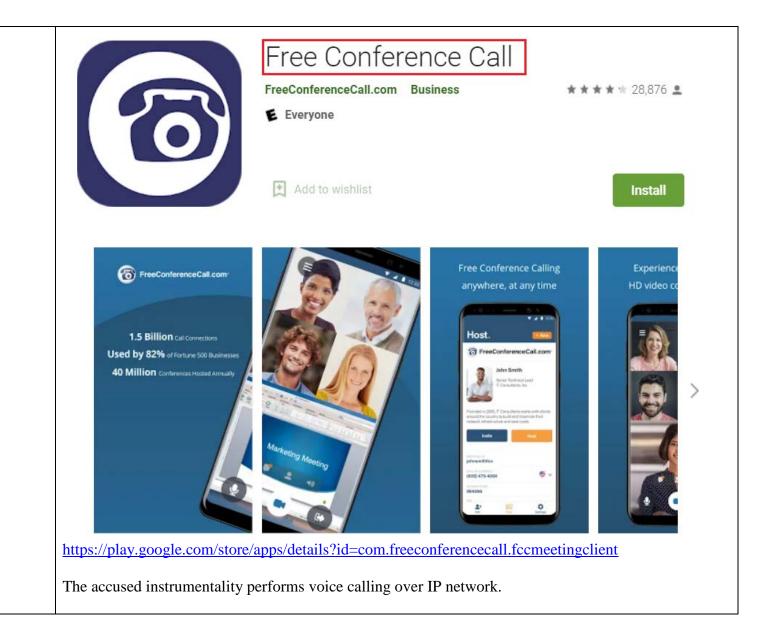
## Free Conference Call App ("The accused instrumentality")

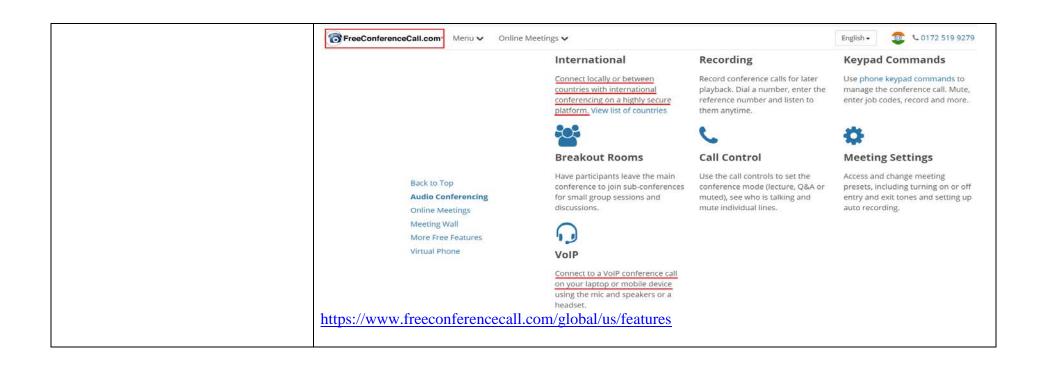
1. A system for detecting or determining any given "VoIP (Voice over internet protocol) location" of any "VoIP enabled wireless device registered to the system" by extracting any such device's "VoIP address or return path" and storing it and updating it in one or more accessible databases, the system including a server, a VoIP enabled wireless device registered to the server and a software module downloadable from the server to the VoIP enabled wireless device, in which:

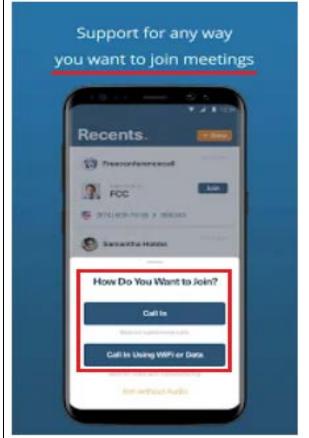
A system utilized by the accused instrumentality is a system for detecting or determining any given "VoIP (Voice over internet protocol) location" (e.g., IP address of a user device enabled with Free Conference Call application) of any "VoIP enabled wireless device registered to the system" (e.g., a user device such as a smartphone enabled with Free Conference Call application) by extracting any such device's "VoIP address or return path" (e.g., IP address of a user device enabled with Free Conference Call application) and storing it and updating it in one or more accessible databases (e.g., Free Conference Call databases), the system including a server (e.g., Free Conference Call server), a VoIP enabled wireless device registered to the server (e.g., a user device such as a smartphone enabled with Free Conference Call application) and a software module (e.g., Free Conference Call application) downloadable from the server (e.g., Free Conference Call server) to the VoIP enabled wireless device (e.g., a user device such as a smartphone enabled with Free Conference Call application).

The system utilized by the accused instrumentality comprises a Free Conference Call server, a user device such as a smartphone enabled with Free Conference Call application and Free Conference Call application. The Free Conference Call application can be installed into a user smartphone device. The accused instrumentality also determines and collects IP address (i.e., VoIP address or VoIP location) of the user smartphone device.











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- · Send meeting invitations

https://play.google.com/store/apps/details?id=com.freeconferencecall.fccmeetingclient

## **Types of Anonymous Information We Collect**

We may also collect and store certain information that does not identify you, such as your Internet protocol address, browser type, domain names and access times ("Anonymous Information"). As you navigate, use, or otherwise interact with the Services, we may use automatic data collection technologies to collect certain information about your equipment and browsing actions, including without limitation: (i) information about your computer or mobile device and internet connection; (ii) details about your visit to the Services, including resources you use on the Services and other traffic, navigational, or communication data; and (iii) your geolocation information. We may also use Cookies (as defined below) and other tracking technologies to collect information about your online activities. "Cookies" are small pieces of information that a website sends to your browser while you are viewing a website. You can instruct your browser, by changing its options, to stop accepting Cookies or to prompt you before accepting a Cookie from the websites you visit. We do not track users across third party websites and therefore do not respond to Do Not Track signals. We may use your Anonymous Information to analyze usage patterns so that we may enhance the Services and improve our internal operations and the content of our software. We may combine such data with certain of your Personal Information.

### 10. INFORMATION WE COLLECT AND DATA SECURITY.

**Website** Free Conferencing collects Navigational Information on visitors to our website. This refers to information about your computer and your visits to this website such as your IP address, geographical location, browser type, referral source, length of visit and pages viewed.

To obtain a conferencing account, you must provide additional registration information which includes an email address and a password. This information will enable you to log in and manage your call experience along with creating and storing recordings of your conferences.

https://www.freeconferencecall.com/global/terms-of-service

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https://www.freeconferencecall.com/global/privacy-policy

## **In-Session Information**

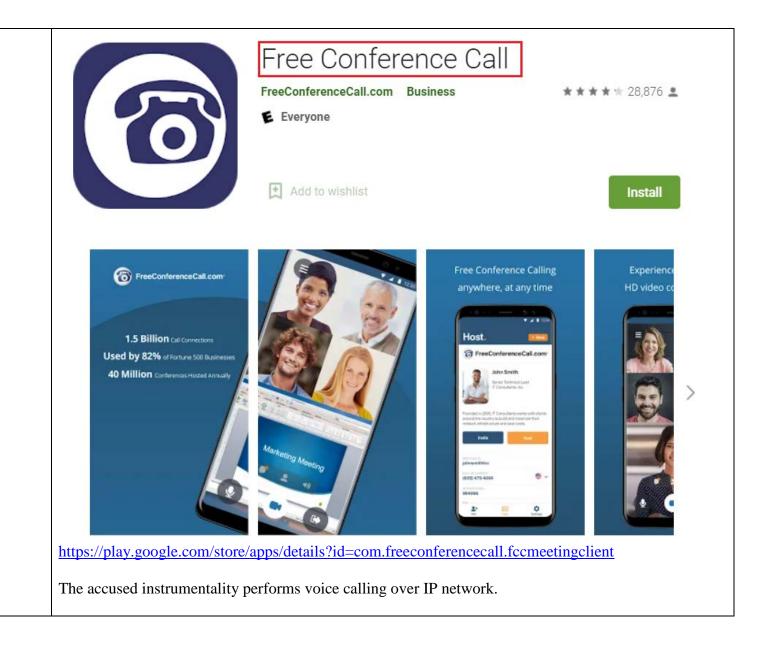
We may collect and store information during your use of the Services, including domestic and international audio, web and video conferencing services, live chat, voicemail, audio, web and video recording, voice broadcasting services and other voice and messaging services. In addition, the company may offer other assorted features and applications as part of its Services from time to time. Such in-session information is protected by the use of end-to-end encryption and only accessible to those users you invite, or with whom you otherwise choose to share information. You will have the ability to record, store, and access information related to your use of the Services, and we will not access this information except as may be necessary to support the Services and anticipate, diagnose, or resolve problems that may limit or disrupt the Services, or as may be required by law. Please be aware that any Personal Information you provide to other users during your use of the Services can be collected, used, maintained, shared, or disclosed by those users, and we are not responsible for the collection, use, maintenance, sharing, or disclosure of data and information by such users.

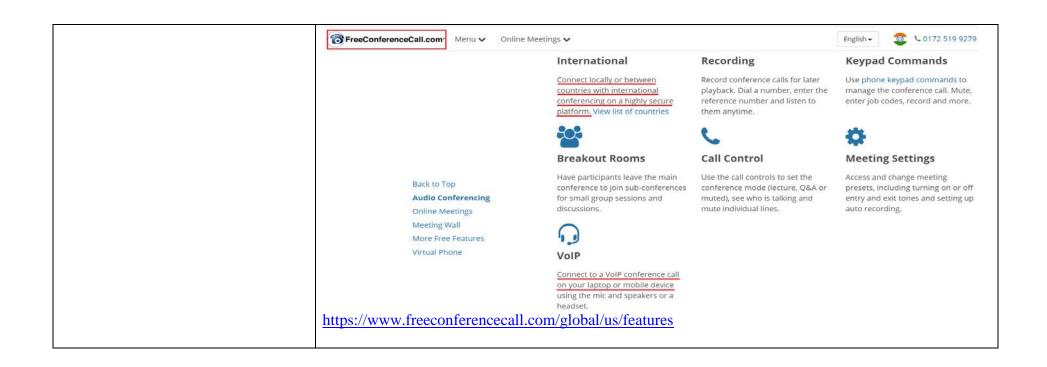
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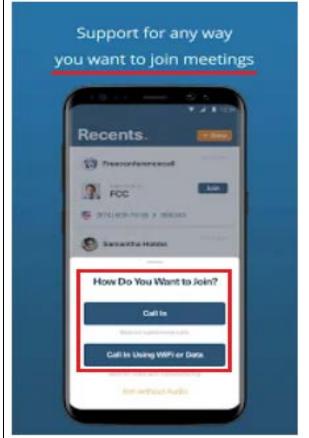
(a) the system is adapted to receive VoIP communications from multiple VoIP enabled wireless devices;

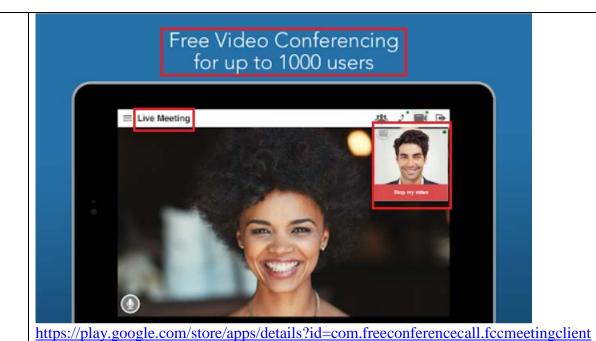
The system utilized by the accused instrumentality is the system which is adapted to receive VoIP communications (e.g., voice calling over IP network) from multiple VoIP enabled wireless devices (e.g., user devices such as smartphones enabled with Free Conference Call application).

The accused instrumentality provides voice calling functionality over IP network between users.

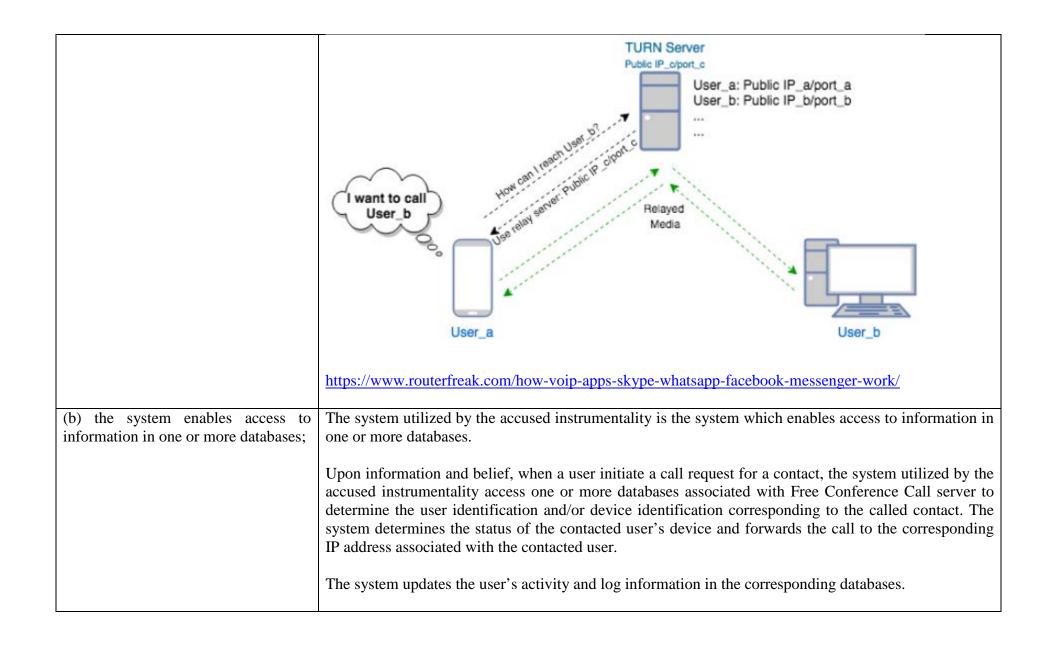


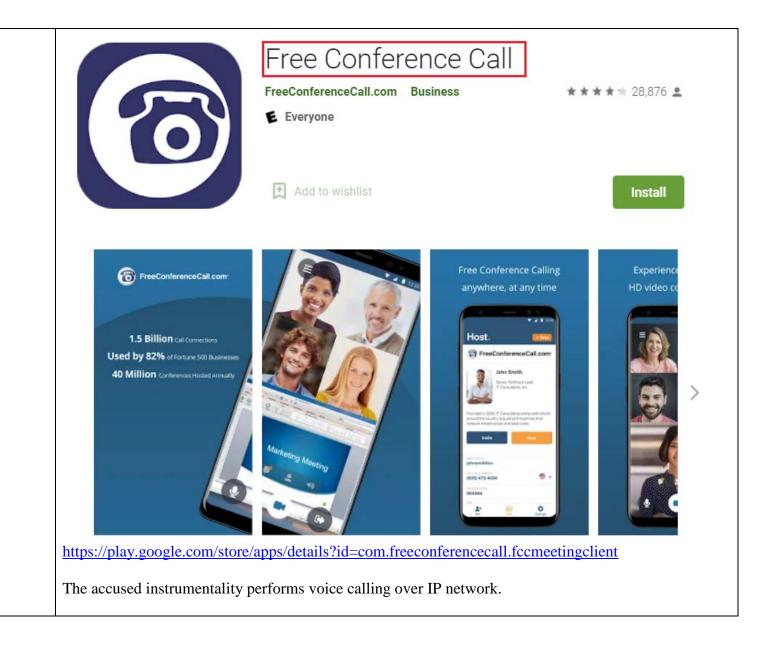




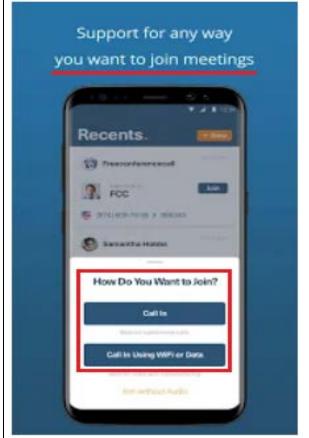


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## Can I host a meeting using Web Viewer?

At this time, only Chromebook supports full host functionality through Web Viewer, including VoIP audio, video and screen sharing. Using the Meeting Dashboard, Chromebook users are also able to: record, select mute modes, chat and more. For details, refer to Host Instructions.

## What features are available to participants with Web Viewer?

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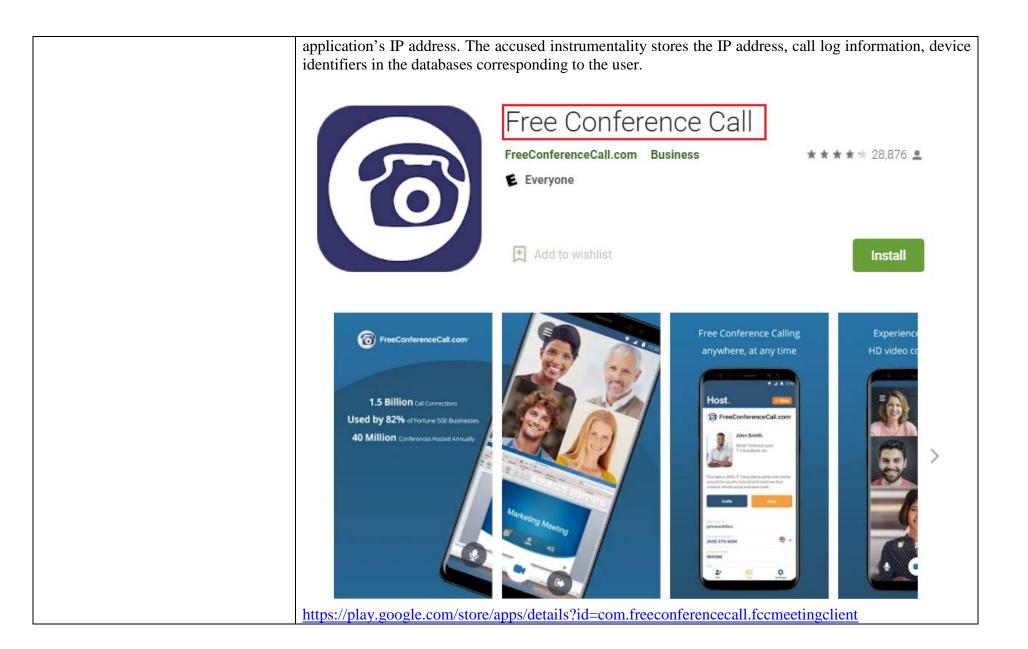
## **In-Session Information**

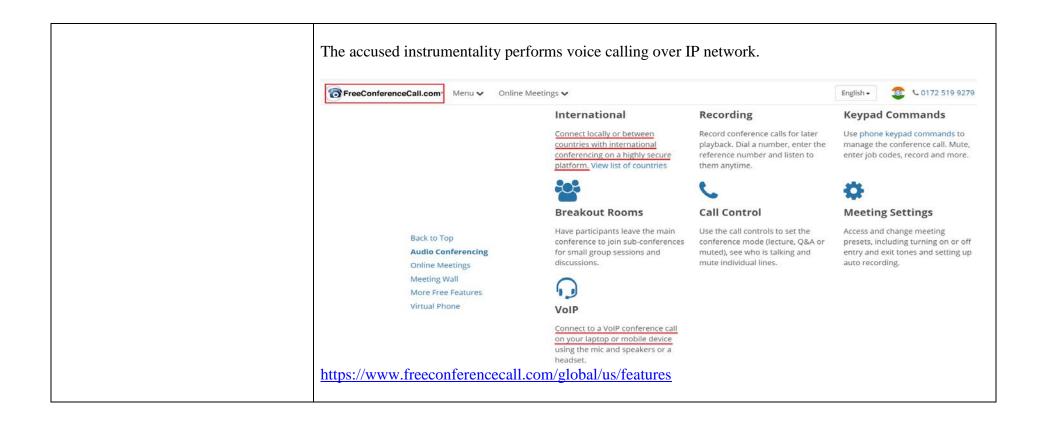
We may collect and store information during your use of the Services, including domestic and international audio, web and video conferencing services, live chat, voicemail, audio, web and video recording, voice broadcasting services and other voice and messaging services. In addition, the company may offer other assorted features and applications as part of its Services from time to time. Such in-session information is protected by the use of end-to-end encryption and only accessible to those users you invite, or with whom you otherwise choose to share information. You will have the ability to record, store, and access information related to your use of the Services, and we will not access this information except as may be necessary to support the Services and anticipate, diagnose, or resolve problems that may limit or disrupt the Services, or as may be required by law. Please be aware that any Personal Information you provide to other users during your use of the Services can be collected, used, maintained, shared, or disclosed by those users, and we are not responsible for the collection, use, maintenance, sharing, or disclosure of data and information by such users.

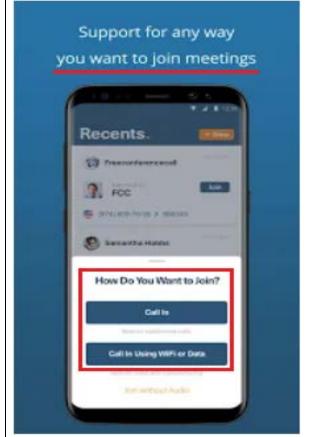
(c) the system is capable of extracting and reporting dynamically the "VoIP address or return path" and all associated information from each incoming data communication from any "VoIP enabled wireless device registered to the system" into a database(s) associated with each corresponding registered VoIP enabled wireless device user account;

The system utilized by the accused instrumentality is the system which is capable of extracting and reporting dynamically the "VoIP address or return path" (e.g., IP address of a user device enabled with Free Conference Call application) and all associated information (e.g., all information collected by the accused instrumentality) from each incoming data communication from any "VoIP enabled wireless device registered to the system" (e.g., a user device such as a smartphone enabled with Free Conference Call application) into a database(s) associated with each corresponding registered VoIP enabled wireless device (e.g., a user device such as a smartphone enabled with Free Conference Call application) user account.

The accused instrumentality extracts and updates a user device enabled with Free Conference Call









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## **In-Session Information**

We may collect and store information during your use of the Services, including domestic and international audio, web and video conferencing services, live chat, voicemail, audio, web and video recording, voice broadcasting services and other voice and messaging services. In addition, the company may offer other assorted features and applications as part of its Services from time to time. Such in-session information is protected by the use of end-to-end encryption and only accessible to those users you invite, or with whom you otherwise choose to share information. You will have the ability to record, store, and access information related to your use of the Services, and we will not access this information except as may be necessary to support the Services and anticipate, diagnose, or resolve problems that may limit or disrupt the Services, or as may be required by law. Please be aware that any Personal Information you provide to other users during your use of the Services can be collected, used, maintained, shared, or disclosed by those users, and we are not responsible for the collection, use, maintenance, sharing, or disclosure of data and information by such users.

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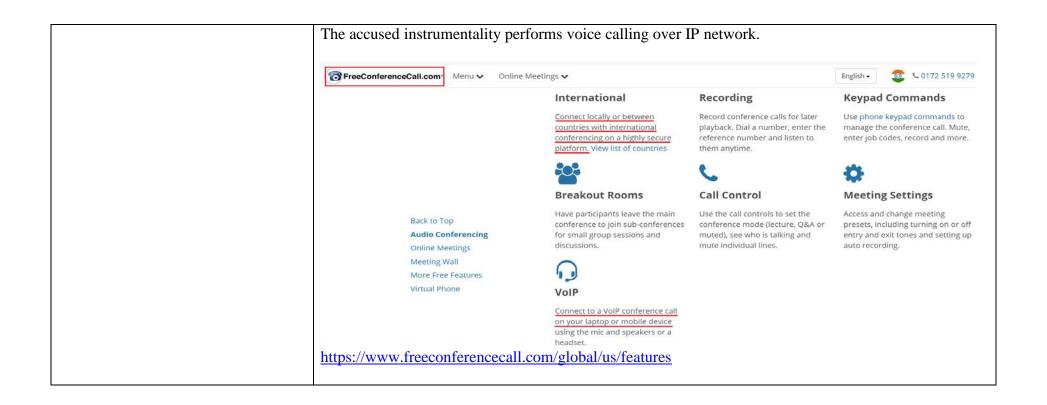
(d) the system is capable of extracting a specific "VoIP address or return path" and all associated information corresponding to a specific registered VoIP enabled wireless device user account from the system accessible database(s) and communicating with each specific VoIP enabled wireless device registered to the system through each specific "VoIP address"

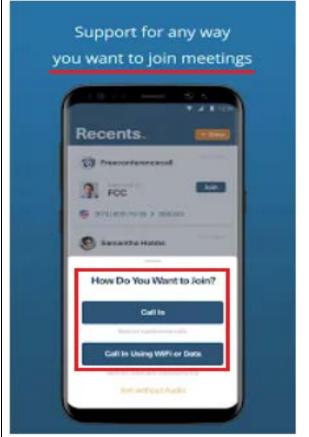
The accused system utilized by the accused instrumentality is the system which is capable of extracting a specific "VoIP address or return path" (e.g., an IP address of a user device such as a smartphone enabled with Free Conference Call application) and all associated information (e.g., device information, hardware information, online status information, etc.) corresponding to a specific registered VoIP enabled wireless device user account (e.g., a user device such as a smartphone enabled with Free Conference Call application) from the system accessible database(s) and communicating with each specific VoIP enabled wireless device (e.g., user device of the called contact such as a smartphone enabled with Free Conference Call application) registered to the system through each specific "VoIP address or return path" (e.g., an IP address of the user device of the called contact such as a smartphone enabled with Free Conference Call application).

or return path";

The accused instrumentality provides voice calling functionality over IP network between users. The accused instrumentality extracts and updates IP addresses of the user devices in its databases. The accused instrumentality enables a user to call a contact by extracting the contacted user's IP address and initiating call procedure corresponding to that IP address.









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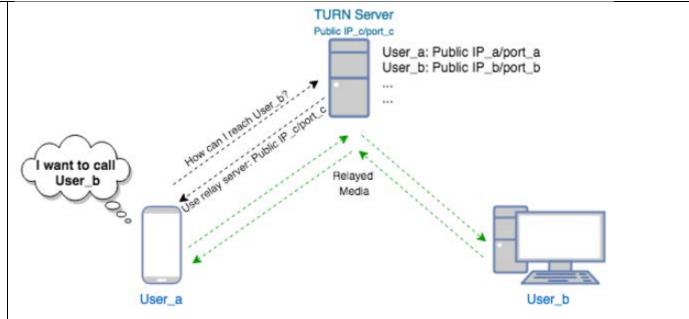
Voice over Internet Protocol refers to the standards that facilitate voice-based phone calls using an internet connection instead of a local telephone company.

Voice over IP converts your voice into a digital signal, compresses it, and sends it over the internet. A VoIP service provider sets up the call between all participants. On the receiving end, the digital data is then uncompressed into the sound that you hear through your handset or speakerphone.

People opt for VoIP because they can make phone calls without any telephone service, which saves them on long-distance charges. If you have internet access, you don't need to run any extra copper wires. This lets employees work from home or **telecommute** to the office as well.

To call someone using VoIP, you need a SIP-compatible desk phone or a VoIP calling app, which means it is assigned an IP address so that calls can be made from your network. Unlike landline phones, they are capable of high-definition (HD) phone calls.

https://www.nextiva.com/blog/how-does-voip-work.html

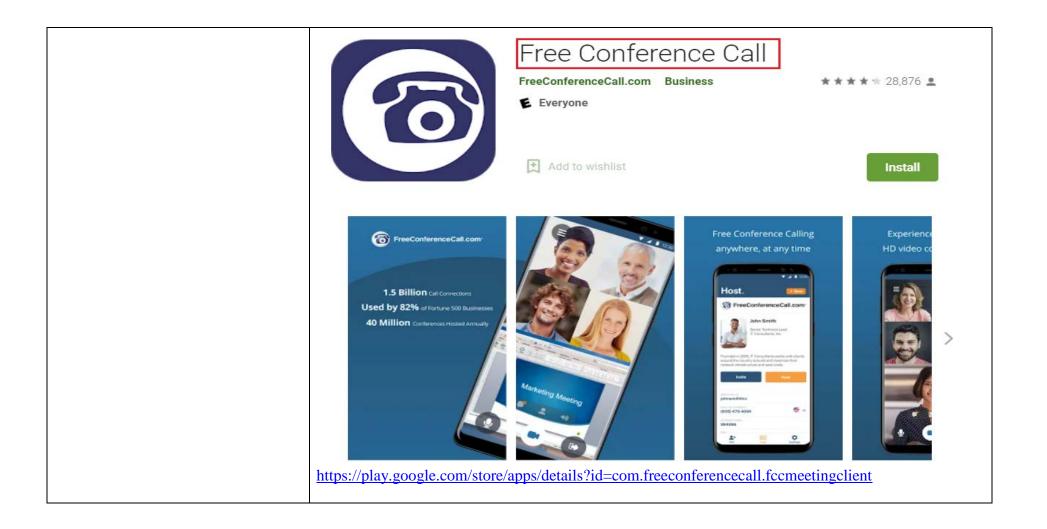


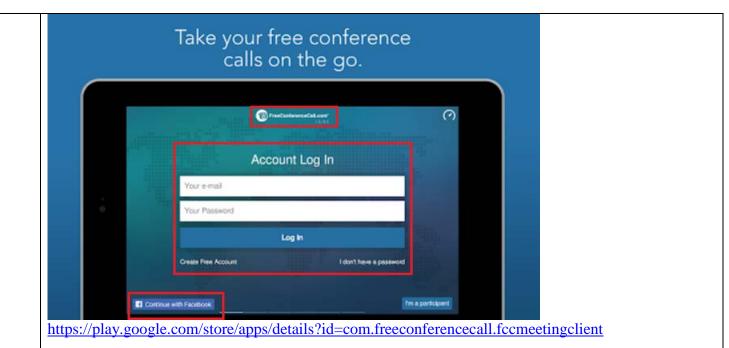
https://www.routerfreak.com/how-voip-apps-skype-whatsapp-facebook-messenger-work/

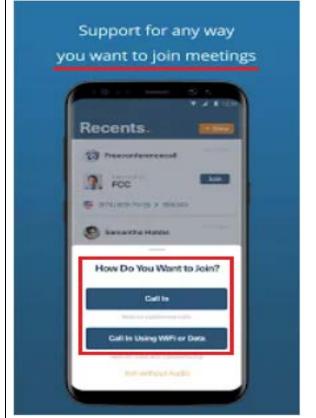
(e) in which the VoIP enabled wireless device registered to the server incorporates the software module, which at certain time intervals authenticates and connects to the server which is part of the system, and

The system utilized by the accused instrumentality practices such that the VoIP enabled wireless device (e.g., a user device such as a smartphone enabled with Free Conference Call application) registered to the server (e.g., Free Conference Call server) incorporates the software module (e.g., Free Conference Call application), which at certain time intervals (e.g., Free Conference Call app polls the Free Conference Call server after regular intervals) authenticates and connects to the server (e.g., Free Conference Call server) which is part of the system.

AS shown below, a user verifies its phone number with the system utilized by the accused instrumentality to access the service provided by the system. The system authenticates the user and connects the user to the Free Conference Call server.







https://play.google.com/store/apps/details?id=com.freeconferencecall.fccmeetingclient

## **How We Use Personal Information**

In general, we may use your Personal Information to:

- Administer your Account and verify your identity;
- Process your payments and fulfill your orders;
- Provide you with the Services and customer support;

https://www.freeconferencecall.com/global/privacy-policy

Upon information and belief, a user device enabled with Free Conference Call application periodically re-engages with the FREE CONFERENCE CALLserver for any further updates. As shown below, an android application periodically authenticates a user device with the help of an account manager or token, The Free Conference Call server authenticates the user device enabled with Free Conference Call application periodically.

## Regular Repeated Pings

For apps that require data updates at regular intervals, tools like Google Cloud Messenger should be used to push this information down to the app. Building your own service often results in polling in the background by setting an alarm for every *x* minutes, then waking up the radio and downloading your data. This does not seem like a big deal, but imagine an app that pings the server for updates every 3 minutes. Extrapolate this out —your app will make 480 connections every 24 hours. Throw in a 10 second state machine timer, and now these "harmless" connections are

 $\underline{https://books.google.co.in/books?id=K5aJCgAAQBAJ\&pg=PT279\&lpg=PT279\#v=onepage\&q\&f=falsed entry and the property of the pro$ 

The optimal frequency of regular updates will vary based on device state, network connectivity, user behavior, and explicit user preferences.

Optimizing battery life discusses how to build battery-efficient apps that modify their refresh frequency based on the state of the host device. That includes disabling background service updates when you lose connectivity and reducing the rate of updates when the battery level is low.

This lesson will examine how your refresh frequency can be varied to best mitigate the effect of background updates on the underlying wireless radio state machine.

Use Firebase Cloud Messaging as an alternative to polling

Every time your app polls your server to check if an update is required, you activate the wireless radio, drawing power unnecessarily, for up to 20 seconds on a typical 3G connection.

<u>Firebase Cloud Messaging (FCM)</u> is a lightweight mechanism used to transmit data from a server to a particular appinstance. Using FCM, your server can notify your app running on a particular device that there is new data available for it.

Compared to polling, where your app must regularly ping the server to query for new data, this event-driven model allows your app to create a new connection only when it knows there is data to download. The model minimizes unnecessary connections and reduces latency when updating information within your app.

https://developer.android.com/training/efficient-downloads/regular\_updates

# Firebase Cloud Messaging

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Firebase Cloud Messaging (FCM) is a cross-platform messaging solution that lets you reliably send messages at no cost.

Using FCM, you can notify a client app that new email or other data is available to sync. You can send notification messages to drive user re-engagement and retention. For use cases such as instant messaging, a message can transfer a payload of up to 4KB to a client app.

Using deprecated Google Cloud Messaging APIs? Learn more about how to migrate to FCM.

https://firebase.google.com/docs/cloud-messaging/



Applications typically try to remember the user using one of three techniques:

- 1. Ask the user to type in a username.
- 2. Retrieve a unique device ID to remember the device.
- 3. Retrieve a built-in account from AccountManager.

Option (1) is problematic. First, asking the user to type something before entering your app will automatically make your app less appealing. Second, there's no guarantee that the username chosen will be unique.

Option (2) is less onerous for the user, but it's tricky to get right. More importantly, it only allows you to remember the user on one device. Imagine the frustration of someone who upgrades to a shiny new device, only to find that your app no longer remembers them.

Option (3) is the preferred technique. Account Manager allows you to get information about the accounts that are stored on the user's device. As we'll see in this lesson, using Account Manager lets you remember your user, no matter how many devices the user may own, by adding just a couple of extra taps to your UI.

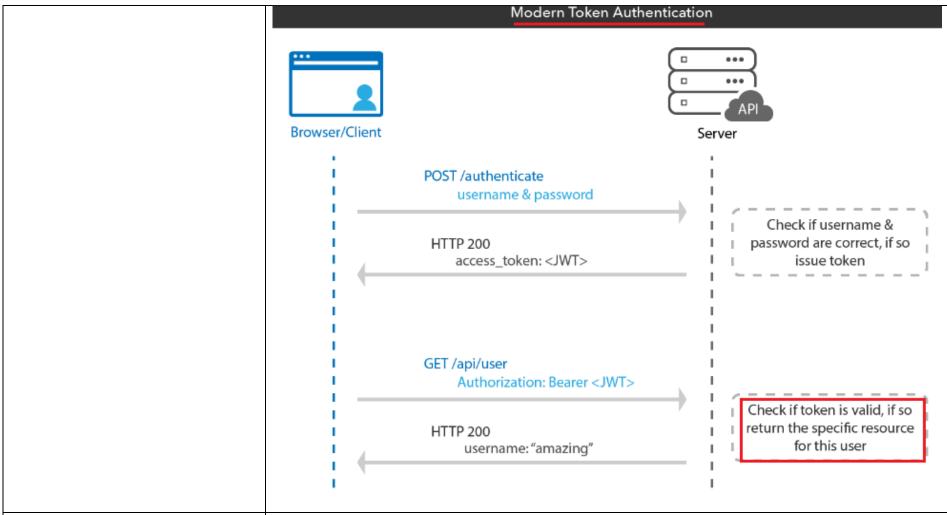
https://developer.android.com/training/id-auth/identify

Many servers support some notion of an *authentication token*, which can be used to authenticate a request to the server without sending the user's actual password. (Auth tokens are normally created with a separate request which does include the user's credentials.) <u>AccountManager can generate auth tokens for applications, so the application doesn't need to handle passwords directly. Auth tokens are normally reusable and cached by AccountManager, but must be refreshed periodically. It's the responsibility of applications to *invalidate* auth tokens when they stop working so the AccountManager knows it needs to regenerate them.</u>

Applications accessing a server normally go through these steps:

- Get an instance of AccountManager using get(android.content.Context).
- List the available accounts using getAccountsByType(String) or
  getAccountsByTypeAndFeatures(String, String[], AccountManagerCallback, Handler). Normally
  applications will only be interested in accounts with one particular type, which identifies the authenticator.
  Account features are used to identify particular account subtypes and capabilities. Both the account type and
  features are authenticator-specific strings, and must be known by the application in coordination with its
  preferred authenticators.

https://developer.android.com/reference/android/accounts/AccountManager



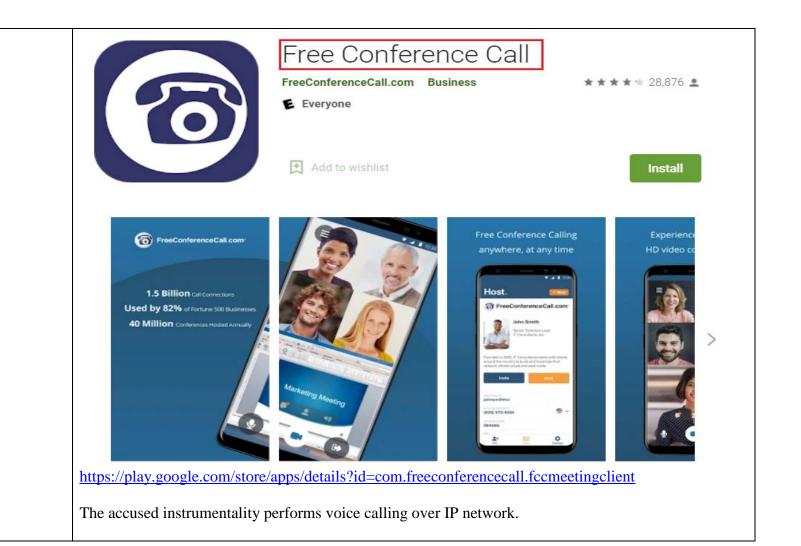
(f) wherein a time between each time interval of the registered VoIP enabled wireless device authenticating and connecting with the server is less than a time allowed by the registered

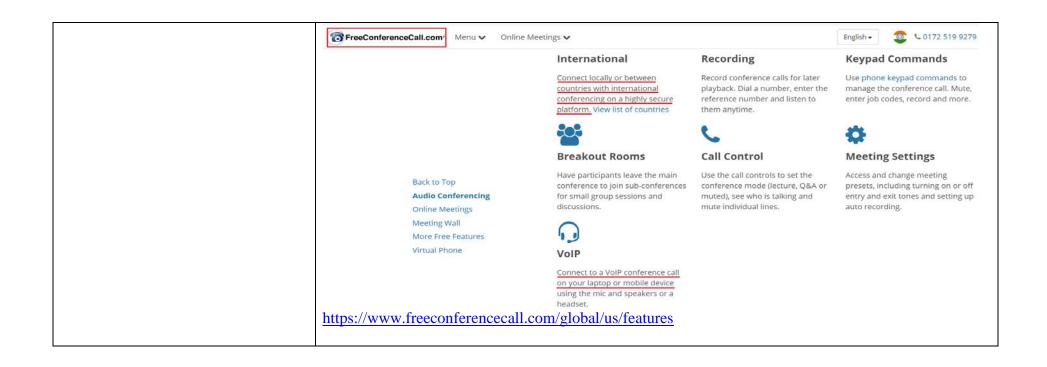
The system utilized by the accused instrumentality practices such that a time between each time interval of the registered VoIP enabled wireless device (e.g., a user device such as a smartphone enabled with Free Conference Call application) authenticating and connecting with the server (e.g., Free Conference Call server) is less than a time allowed by the registered VoIP enabled wireless device (e.g., a user device such as a smartphone enabled with Free Conference Call application) to receive a response from

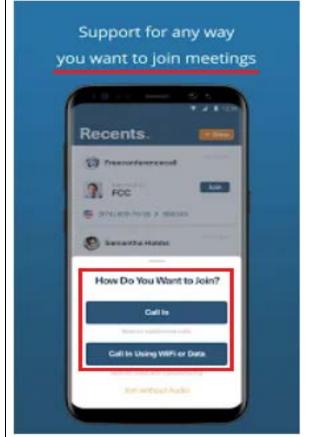
VoIP enabled wireless device to receive a response from the server.

the server (e.g., Free Conference Call server).

When a user device such as a smartphone enabled with Free Conference Call application, during a Free Conference Call voice call, switches from cellular network to Wi-Fi network or vice versa, the IP address of the user device changes. The accused instrumentality provides seamless and smooth voice calling functionality even when the user device changes the network. The accused instrumentality must take less time to authenticate and connect the user device with a new IP address to the Free Conference Call server than a time allowed by the user device to receive a voice calling response from the server to ensure no data packet loss.







https://play.google.com/store/apps/details?id=com.freeconferencecall.fccmeetingclient

#### Features include:

- · Free application download
- · Free account activation
- · Free HD audio conference calls w/up to 1,000 participants
- · Free HD video conferencing and screen sharing w/up to 1,000 participants
- · Free International conferencing with dedicated dial-in numbers in 75 countries...and growing!
- · Conference features: web controls, including mute and record, lock, view participants, Q&A and more
- · One-touch conference commands to manage calls
- · Dial-in by VoIP
- · Unlimited account and conference access
- · Reservationless calling with availability 24/7
- · Save and store existing accounts
- · Send meeting invitations

 $\underline{https://play.google.com/store/apps/details?id=com.freeconferencecall.fccmeetingclient}$ 

## **Types of Anonymous Information We Collect**

We may also collect and store certain information that does not identify you, such as your Internet protocol address, browser type, domain names and access times ("Anonymous Information"). As you navigate, use, or otherwise interact with the Services, we may use automatic data collection technologies to collect certain information about your equipment and browsing actions, including without limitation: (i) information about your computer or mobile device and internet connection; (ii) details about your visit to the Services, including resources you use on the Services and other traffic, navigational, or communication data; and (iii) your geolocation information. We may also use Cookies (as defined below) and other tracking technologies to collect information about your online activities. "Cookies" are small pieces of information that a website sends to your browser while you are viewing a website. You can instruct your browser, by changing its options, to stop accepting Cookies or to prompt you before accepting a Cookie from the websites you visit. We do not track users across third party websites and therefore do not respond to Do Not Track signals. We may use your Anonymous Information to analyze usage patterns so that we may enhance the Services and improve our internal operations and the content of our software. We may combine such data with certain of your Personal Information.

https://www.freeconferencecall.com/global/privacy-policy

#### 10. INFORMATION WE COLLECT AND DATA SECURITY.

**Website** Free Conferencing collects Navigational Information on visitors to our website. This refers to information about your computer and your visits to this website such as your IP address, geographical location, browser type, referral source, length of visit and pages viewed.

To obtain a conferencing account, you must provide additional registration information which includes an email address and a password. This information will enable you to log in and manage your call experience along with creating and storing recordings of your conferences. https://www.freeconferencecall.com/global/terms-of-service

### Can I host a meeting using Web Viewer?

At this time, only Chromebook supports full host functionality through Web Viewer, including VoIP audio, video and screen sharing. Using the Meeting Dashboard, Chromebook users are also able to: record, select mute modes, chat and more. For details, refer to Host Instructions.

#### What features are available to participants with Web Viewer?

Participants can join a meeting with VoIP audio and video conferencing and view screen sharing. Participants are able to send and receive chat messages, view participants and mute/unmute their own line. <a href="https://www.freeconferencecall.com/global/support">https://www.freeconferencecall.com/global/support</a>

As shown below, an exemplary application manages network connectivity.

Class that answers queries about the state of network connectivity. It also notifies applications when network connectivity changes.

The primary responsibilities of this class are to:

- 1. Monitor network connections (Wi-Fi, GPRS, UMTS, etc.)
- 2. Send broadcast intents when network connectivity changes
- 3. Attempt to "fail over" to another network when connectivity to a network is lost
- 4. Provide an API that allows applications to query the coarse-grained or fine-grained state of the available networks
- 5. Provide an API that allows applications to request and select networks for their data traffic <a href="https://developer.android.com/reference/android/net/ConnectivityManager#EXTRA\_IS\_FAILOVER">https://developer.android.com/reference/android/net/ConnectivityManager#EXTRA\_IS\_FAILOVER</a>

If this is a connection that was the result of failing over from a disconnected network, then the FAILOVER CONNECTION boolean extra is set to true.

For a loss of connectivity, if the connectivity manager is attempting to connect (or has already connected) to another network, the NetworkInfo for the new network is also passed as an extra. This lets any receivers of the broadcast know that they should not necessarily tell the user that no data traffic will be possible. Instead, the receiver should expect another broadcast soon, indicating either that the failover attempt succeeded (and so there is still overall data connectivity), or that the failover attempt failed, meaning that all connectivity has been lost.

https://developer.android.com/reference/android/net/ConnectivityManager#EXTRA\_IS\_FAILOVER

## Detect connection changes

The final piece of the puzzle is the <code>BroadcastReceiver</code> subclass, <code>NetworkReceiver</code>. When the device's network connection changes, <code>NetworkReceiver</code> intercepts the action <code>CONNECTIVITY\_ACTION</code>, determines what the network connection status is, and sets the flags <code>wifiConnected</code> and <code>mobileConnected</code> to true/false accordingly. The upshot is that the next time the user returns to the app, the app will only download the latest feed and update the display if <code>NetworkActivity.refreshDisplay</code> is set to <code>true</code>.

Setting up a BroadcastReceiver that gets called unnecessarily can be a drain on system resources. The sample application registers the BroadcastReceiver NetworkReceiver in onCreate(), and it unregisters it in onDestroy(). This is more lightweight than declaring a <receiver> in the manifest. When you declare a <receiver> in the manifest, it can wake up your app at any time, even if you haven't run it for weeks. By registering and unregistering NetworkReceiver within the main activity, you ensure that the app won't be woken up after the user leaves the app. If you do declare a <receiver> in the manifest and you know exactly where you need it, you can use setComponentEnabledSetting() to enable and disable it as appropriate.

https://developer.android.com/training/basics/network-ops/managing